Share & Care Group

① major type of tissue	Subdivision	location	function	structure
Epithelial tissues - continuous layer over the body surface and lines most body cavities. - cells have no or little space in between and set on a basement membrane (to supply tissue with nutrients and O_2, separate it from connective tissue) - specialized cells - divided according to no. of layers.	Simple Squamous	lines alveoli in lungs walls of capillaries oral cavity.	protection diffusion filteration secretion absorption.	flat cells w... central bulging
	Cuboidal	kidney tubules ducts of exocrine glands surface of ovaries	secretion absorption protection.	cube shaped with central o... nuclei
	Columnar ciliated	digestive tract ~~and~~ ciliated: oviducts and respiratory tract (large branchiols) genitourinary tract	Absorption secretion protection.	column shaped cells with ov... nuclei, often microvill... cilia.
	psudo stratified ciliated columnar PCCE	- non-ciliated: large gland part of male urethra - ciliated: major lining tissue of the respiratory tract - mucus is secreted by goblet cells, augmented by glands (seromucous gland in tracea)	Secretion movement of mucus to remove particulate matter	irregular shaped nuclei at diffe... levels are diagn... for psudostratif...
	Stratified Squamous (mostly)	- outer layer of skin - female reproductive system - anal canal - esophagus - lining of mouth cavity (non keratinized)	protection	many layer o... squamous cell... the top cells ar... and scaly may ~~contain~~ or n... be kerat...
connective tissue - widely separated cells (fibroblasts) make fibers. - not specialized cell because they can ~~be~~ be modified to: - pigment cells: produce melanin - adipocyte: store fats - phagocytes: protection - large amount of extracellular material (matrix) in space between cells.	Proper loose areolar	- lie beneath the epithelial tissue: and many internal organs (lungs, arteries, urinary bladder) - form protective layer over muscles, nerves, blood vessels.	support organs matrix provide abundant space for entry of blood and lymphatic vessels and nerve fibers.	contain scatte... protein fibers are white ... and yellow ela... cells are fibr... separated by ... jelly like ma... white collagen → strong - flexible yellow elastic → ... matrix: is jelly...
	adipose	~~fibers plates~~ fibroblasts enlarges to store fats and the space is reduced. (adipocytes)		

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substance give flexibility and
strength.
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stance not as stronge as collagen
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ided according to the
ions types and arrangments
the matrix.

with red marrow (tissue
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calcium salts.
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Dense fiberous connective tissue	- in tendons that connect muscle to bone - in ligaments connect bone togeter at joints.	- poor blood supply	densily packed fibers of collagen may be in regular or irregular arrangements space is filled with fibe
cartilage	divided according to the type of fiber present in the matrix	- cells are (chondrocyte) ~~cells are~~ lie in small chamber (lacunae) (تجويف) sperated by matrix that is solid but flexible. - lackes blood supply so takes long time to heal when injured.	
Hyaline	- the nose - ends of long bones - ribs - supporting rings of winde pip (larynx) - fetal skeleton (replaced by bone) (osification)	most common type contain fine collagen the matrix has a milk glass appearance.	
elastic	- outer ear - Eustachian tube - supporting rings of larynx.	more elastic fibers than Hyaline so it is more flexible	
fibrocartilage	- peds between vertebrae - joints of the knee (inter vertebral disc)	- matrix contain stronge collageneous fibers - the strongest kind of cartilage.	
bone	- most rigid connective tissue - consist of extremely hard matrix of calcium salts deposited around protein fibers. - minerals give protein rigidity - protein provide elacticity and strength. - well supplied with blood vessels.		
compact	- the bone cells (osteocytes) are located in lacunae that are arranged in cycles around tiny tube called ~~Haversian~~ Haversian Canal. - nerve fibers and blood vessels are in this canals to provide nutrients and O_2. - the cavity of long bone usually contains yellow marrow (medullary cavity) which is a fat storage tissue.		
spongy cancellous	- contain numerous of bony bars and plates (trabeculae) separated by irrigular spaces. - osteocytes in lacuna, collagen fibers are present, and irrigular thin plates of bone (spongy) which are separated by irrigular space		